

EVERSHARP, Inc.

S E R V I C E M A N U A L



EVERSHARP, INC. • 1800 ROSCOE ST. • CHICAGO 13, ILLINOIS

INTRODUCTION

This manual has been prepared to acquaint you with parts used in Eversharp pens and pencils and to outline repairing procedures. We realize that every satisfactory repair depends greatly on the skill of the service man. He should know the pen and pencil. To give the satisfaction that a customer should expect from a precision writing instrument—he should understand the following:

- 1.** The *correct parts* that make up a pen and automatic pencil.
- 2.** The functional characteristics of a pen; *air pressure, ink flow*, and the necessary *adjustments* to control them.
- 3.** The *tools* that are required to make the repairs and adjustments.
- 4.** He must understand *nibs* and *writing styles*. A perfect writing pen may prove unsatisfactory to its owner unless the nib meets his particular need.

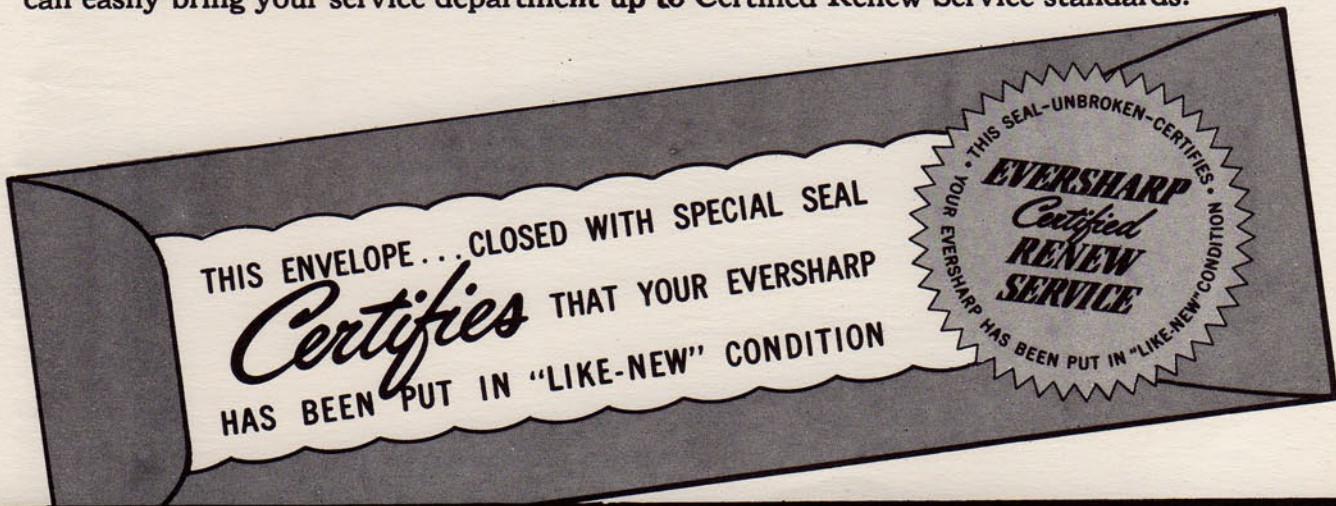
After the pen has been properly repaired one other factor must be considered—*your customer*. Teach him to *properly fill* and *care* for this pen. This is important. You will be rewarded with your customers' appreciation of a job well done.

EVERSHARP *Certified* **RENEW SERVICE**

THE Eversharp Certified Renew Service, recently announced, has already met with outstanding success all over the country. It is quite obvious that consumers can be sold a really complete repair job at a price which is both acceptable to them and profitable to the dealer. We have all wanted to go beyond the realm of "functional repair", and we feel that our Certified Renew Service accomplishes this to the satisfaction of everyone concerned.

There is one very vital point that must be understood. Eversharp has no intention, now or at any future time, to abrogate any guarantees that are in effect. The Certified Renew Service is an extra service . . . a service that is being sold and sold hard through our "Take It Or Leave It" radio program, with point of sale and counter displays. In addition it is being merchandised with a special envelope with a gold seal certifying that the customer has received the Renew Service. At the present time, this service is being successfully sold, because it represents a real value.

Here is what the Renew Service consists of: The units will be completely disassembled, worn or deteriorated parts replaced, then cut down and buffed to a "like new" finish. You are undoubtedly performing most of these operations, and we are certain that you can easily bring your service department up to Certified Renew Service standards.



- COUNTER CARDS
 - STREAMERS
 - "TAKE IT OR LEAVE IT"
- Starring GARRY MOORE

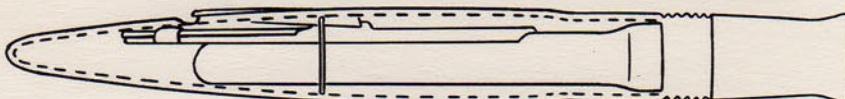


Everything you need to sell your customers
EVERSHARP'S CERTIFIED NO. 150 RENEW SERVICE

EVERSHARP SKYLINE PENS



All Eversharp Skyline Pens consist of a *barrel assembly*, *cap assembly* and *nib and feed assembly*.



Barrel Assembly

Barrel assembly consists of *barrel*, *lever*, *pivot spring*, *pressure bar*, *sac* and *section*. In assembling the component parts of the barrel assembly, use the following procedure:

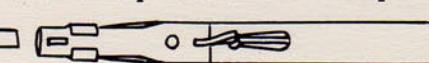
- Assemble lever and pressure bar with pivot ring.



LEVER RING



LEVER

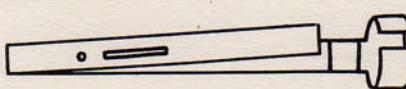


SPRING LOOP PRESSURE BAR



PRESSURE BAR COMPLETE

Place *lever* directly on pressure bar *spring loop*. Press down lever with thumb *above perforation* and insert pivot ring through both.

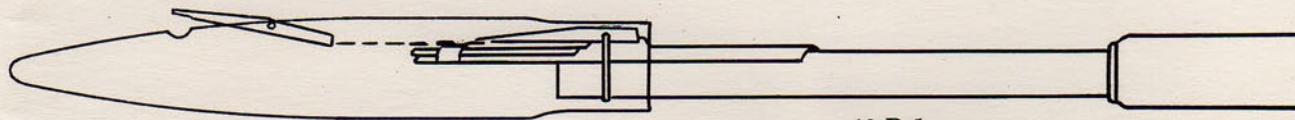


ANCHOR PRESSURE BAR



"V" SPRING PRESSURE BAR

On older Skyline models. Replace anchor pressure bar or V spring type pressure bar with a new assembly consisting of *new style pressure bar* and the *lever* removed from original barrel. Old and new style model levers look the same but are *perforated differently*. Using the *wrong lever* will either leave a small opening in barrel slot or lever will not close correctly in slot.

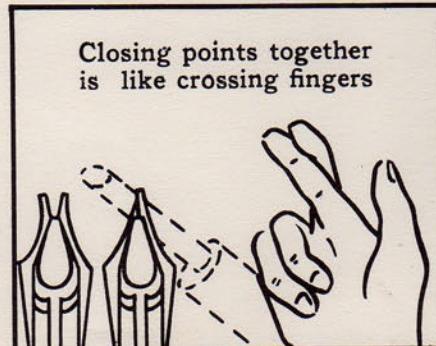
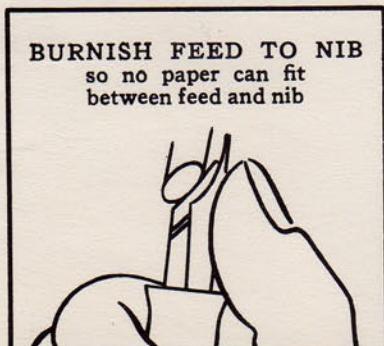
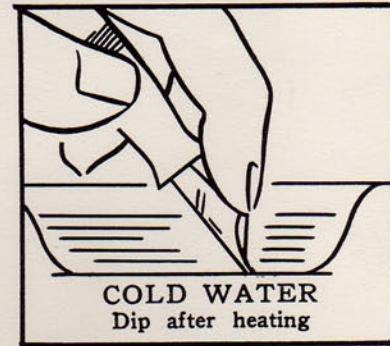
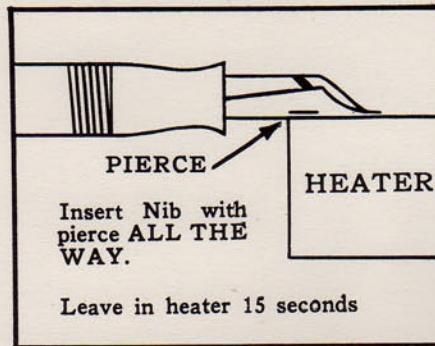
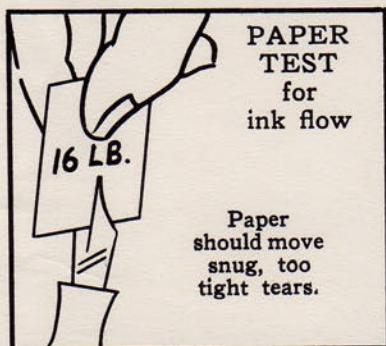


10-R-5

- Assemble pressure bar assembly to barrel using lever assembly tool #10-R-5. Insert assembly in tool and *slowly* guide assembly into barrel until lever is about $\frac{2}{3}$ into lever slot. Raise tool while completing assembly so that lever will go *above* barrel slot. Remove tool #10-R-5 and *gently* pull assembly in place. Pivot ring will engage in groove in barrel holding assembly firmly in place. *Operate* lever several times to insure satisfactory action.
- Assembly sac to section. Coat shoulder of section with sac cement. Slip sac over cemented shoulder.
- Assemble section assembly to barrel. Apply acetone with a small brush to *inside* of barrel. Press barrel and section *firmly* together. Insert slender rod through section and into sac to be certain sac is not twisted in barrel.

EVERSHARP SKYLINE PENS (Cont'd)

- 5.** Assemble nib and feed to barrel. Ream section to proper size for nib and feed assembly. Use hand reamer #11-R-8 (small feed) or #11-R-9 (large feed). Assemble breather tube to feed. Place nib over feed. Grasp nib and feed, in nib setting pliers and press nib and feed firmly in place with *point* of nib aligned with *lever*. Use nib projection gauge for proper depth of setting.
- 6.** Adjust nib. Nib adjustment is *very important* and requires care and skill. A properly adjusted nib will insure *smoother* writing with uniform *flow of ink* and an improperly adjusted nib will flow uneven and be *scratchy*. The following steps must be observed in making the adjustment.
- A.** Point of feed *must* rest against nib. Check pressure of feed against nib using a piece of ordinary paper (approximately .0035" to .004" thick) as a gauge. Paper *MUST NOT* fit between feed and nib. If paper *does* fit, feed must be heated and burnished into place so that it rests *lightly* against nib. Cool feed and check again.
- B.** Points of nib must be *aligned*, so that tip approximates a sphere. To align points, use a burnisher and *press firmly* against *shoulder* of point to be moved, bracing *opposite shoulder* of nib against the *thumb*. If necessary, *repeat* procedure on opposite shoulder. This *may* close gap in slit of nib, and, if necessary to open or widen gap in slit, place feed on solid surface and, using a burnisher, press nib firmly *behind* perforation. Repeat operation until desired gap is obtained. Occasionally a nib, even though properly adjusted, may be rough or "scratchy." To remove roughness, *hone* the nib on a fine grade of crocus paper (0000) treated with *rouge*. Describe a figure eight motion on the crocus paper, *rotating* the pen while describing the figure eight.



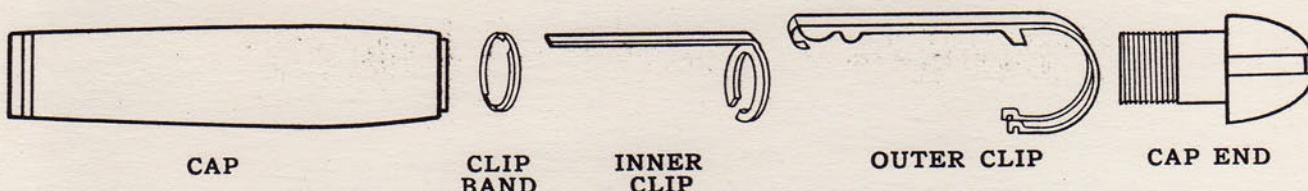
CAP ASSEMBLY

A complete cap consists of the *cap* and the *cap end* and *clip assembly*. The cap end and clip assembly is made up of a *cap end*, *clip band*, *outer clip* and *inner clip*. Use the following procedure to assemble:

1. Slip cap band over stem of cap end, *cup side down*. Align *notch* in top of band with *groove* in top of cap end.
2. Engage prongs of outer clip in *notch* of cap band. Circular portion of outer clip should lie in *groove* of cap end.
3. Slip stem of cap end through *inner clip*.

Press inner clip into the *notch* in the side of cap band. *Tang* of inner clip now should be *under* outer clip.

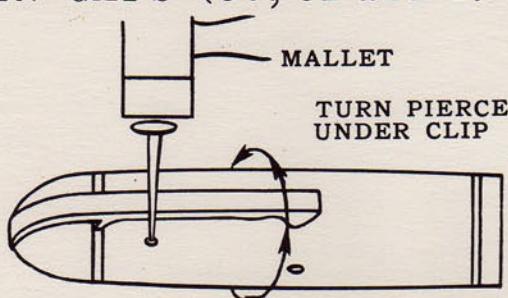
4. Press tang of inner clip *firmly* into the *channel* of outer clip. Fold *bottom ear* of outer clip *over* inner clip. Do this firmly but *preserve radius of ear*. Tightly close *small side ears* over tang of inner clip. *Large side ears* are now *pressed firmly* against bottom ear.
5. Screw cap end and clip assembly into cap.
6. Firmly press cap end of cap into tool No. 11-R-3. Clip should enter slot. This will iron clip band to conform with the outside of cap.



Caps which were made prior to 1946 must be modified to accommodate the new style cap end and clip assembly. This modification may be made by reaming the cap with tool #11-R-1 and retapping threads with plug tap #11-R-5.



TO TIGHTEN GOLD FILLED SHELLS ON PRESENTATION PEN CAPS (60, 61 and 49Y)



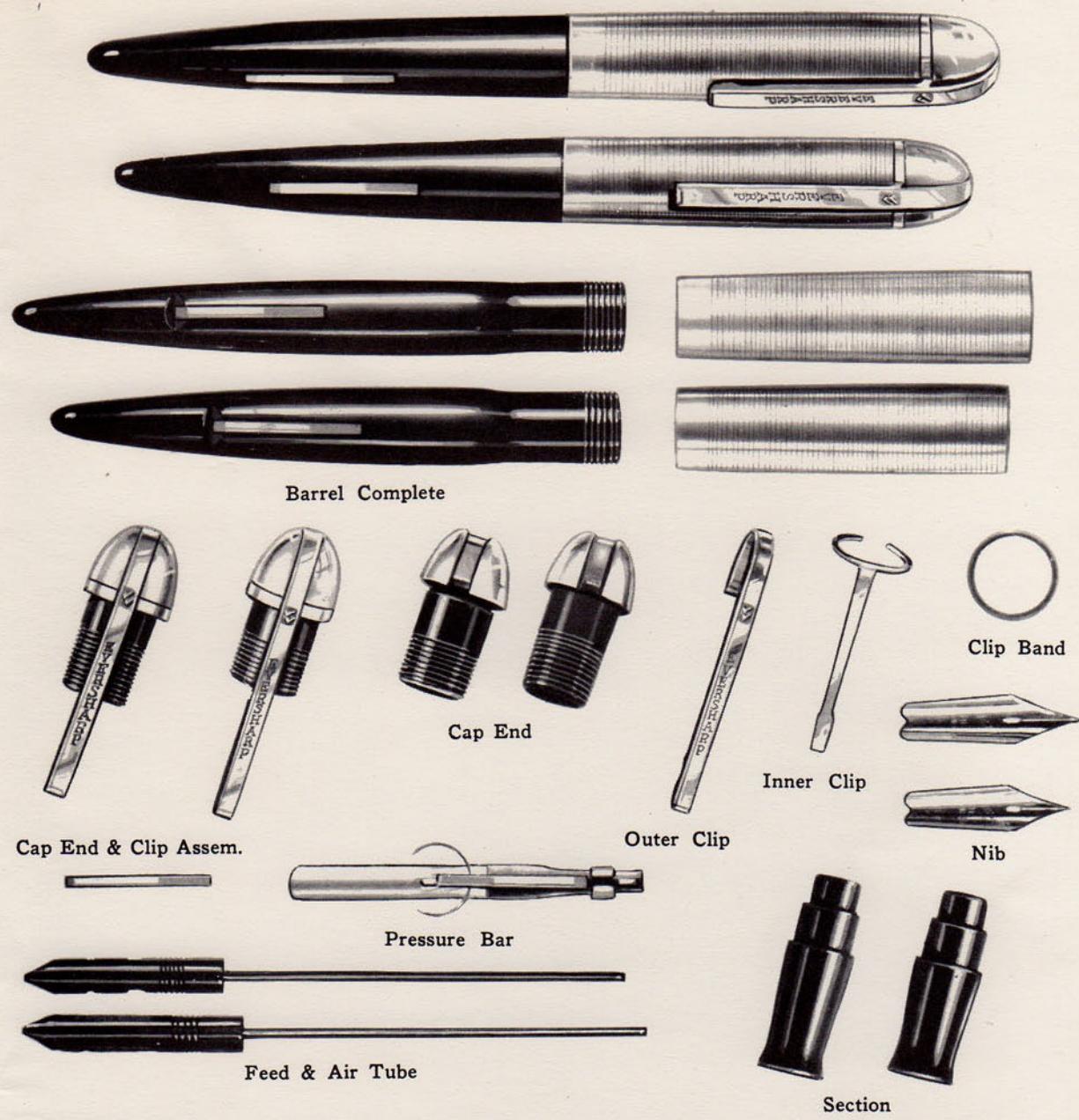
If the gold filled cap shell should come loose, tighten in the following manner: Insert the *closed end* of a pen barrel into *cap*. The cap should be in same position as when writing. Exert pressure on *barrel* to expand insert against *shell* while holding parts in this manner, tighten cap end into insert. Be sure that shell is *pressed firmly* against clip band. With pointed tool, *pierce* or *indent* the cap shell about $\frac{1}{4}$ " down from clip band and *to the left of the clip*. Turn *shell* clock-wise on liner so that the *indentation* is concealed by clip.

Inserts that are very loose may be removed, *cement* applied and re-assembled. Screw a *plug tap* into cap thread and pound out insert. Coat *insert* with 3M cement and carefully tap insert into *shell*. Allow 24 hours for cement to set before completing the assembly.

When threads in insert are stripped, replace the insert. The worn insert may be burned out or drilled out with a 29/16" drill. Re-assemble as above.

PRESENTATION PEN

MODELS D-60—D-61—J-60—J-61

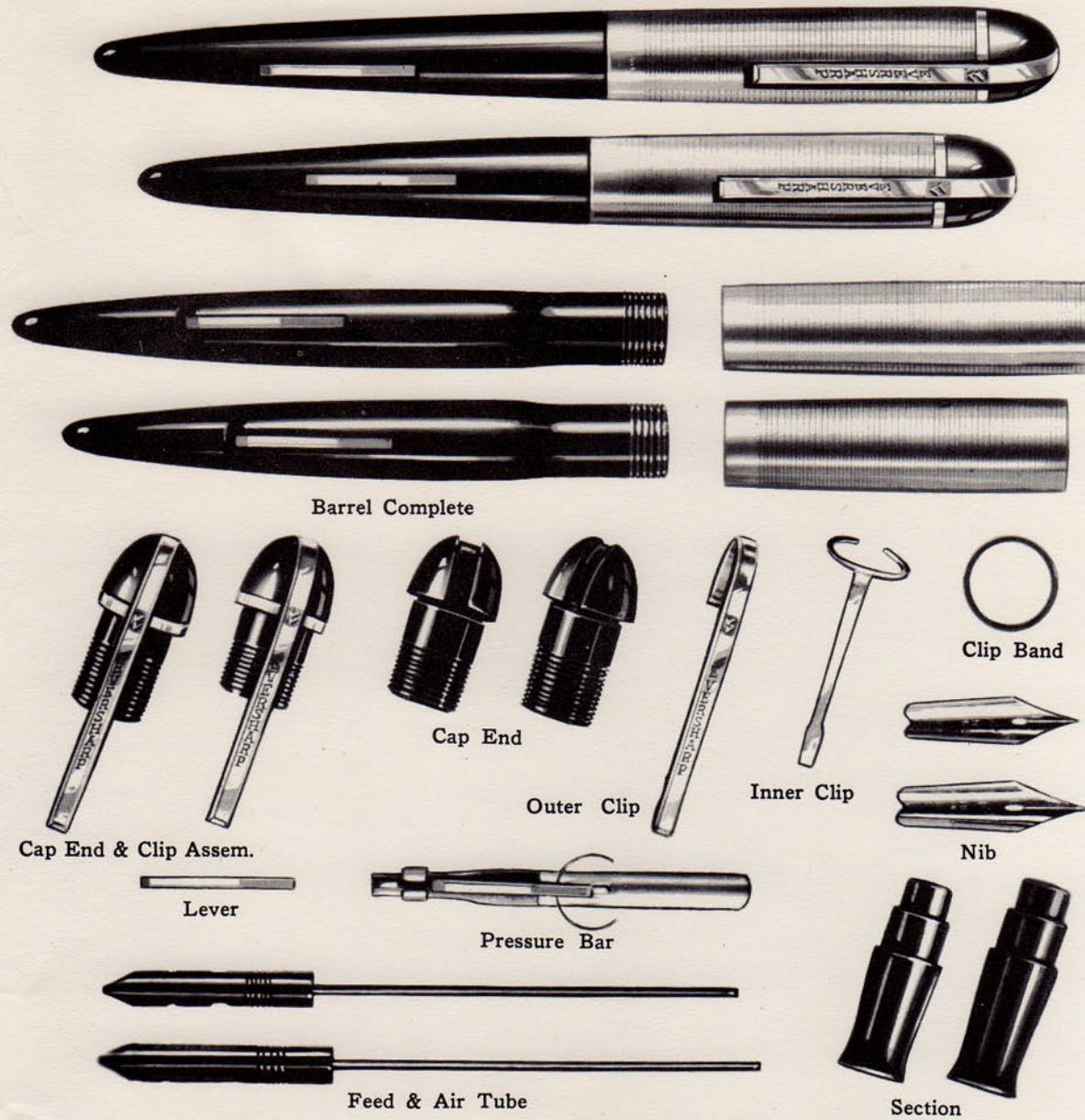


PRICE LIST

MODEL NO.	D60 (J60)		D61 (J61)		MODEL NO.	D60 (J60)		D61 (J61)	
List Price	\$9.75		\$9.75		List Price	\$9.75		\$9.75	
Part Name	Part No.	Price	Part No.	Price	Part Name	Part No.	Price	Part No.	Price
Cap Complete	6045	\$5.35	5631	\$5.35	Lever	5095	.15	5095	.15
Cap Only	5263	3.50	5260	3.50	Pressure Bar	5181	.15	5181	.15
Cap End & Clip Assem.	5576	1.85	5575	1.85	Section	10022	.25	10023	.25
Cap End	5574	1.00	5573	1.00	Sac	5086	.10	5087	.10
Outer Clip	10037	.35	10037	.35	Feed & Air Tube . . .	5241	.25	5240	.25
Inner Clip	5098	.25	5098	.25	Nib 7-5 A				3.25
Clip Band	5099	.25	5099	.25	Nib 55-5 A		2.50		3.25
Barrel Complete * . . .	12021	1.65	12018	1.65	* Includes lever and pressure bar				
					A 30c old gold allowance				

PRESENTATION PEN

MODELS 60—61

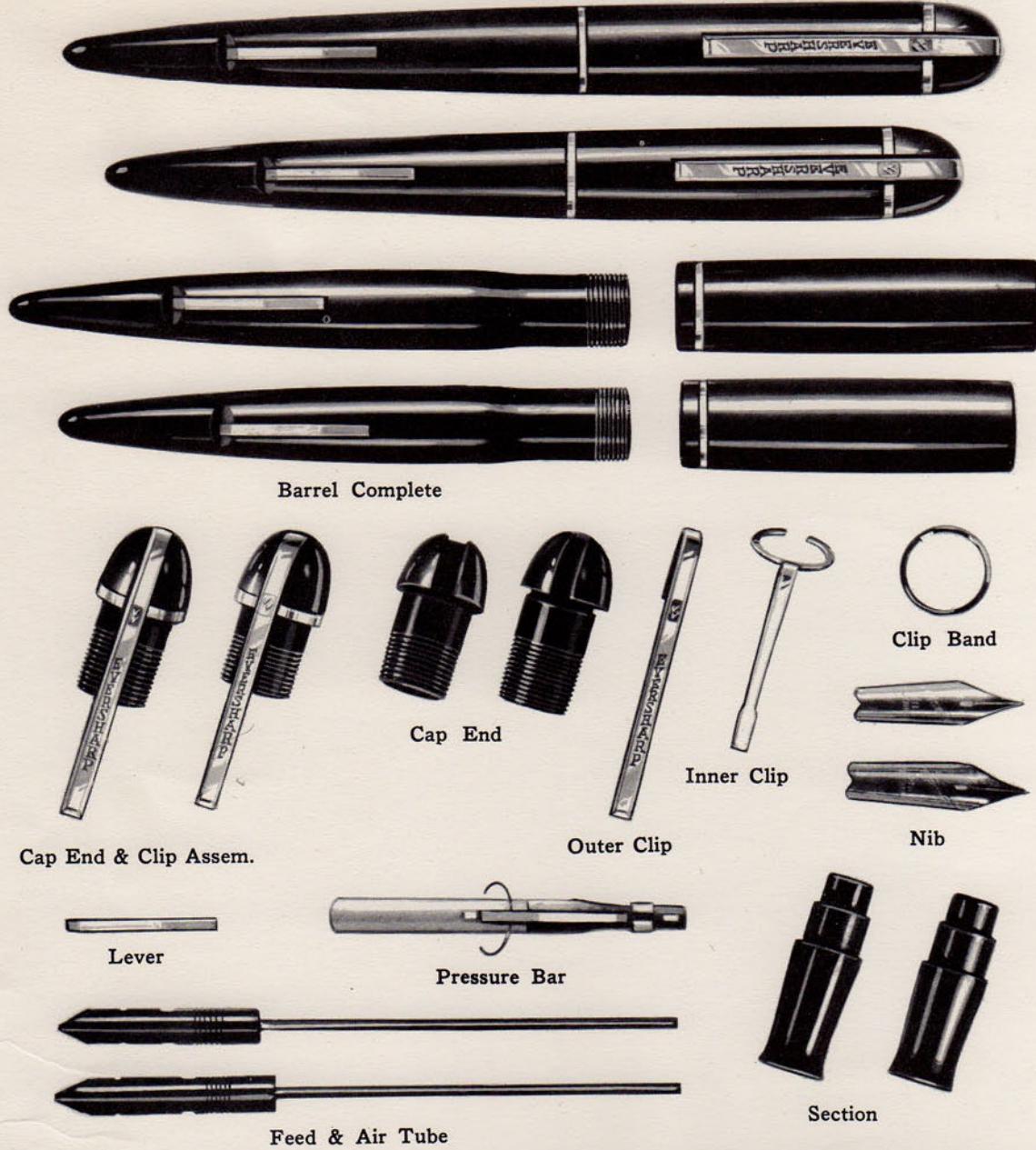


PRICE LIST

MODEL NO.	60		61		MODEL NO.	60		61	
List Price	\$9.75		\$9.75		List Price	\$9.75		\$9.75	
Part Name	Part No.	Price	Part No.	Price	Part Name	Part No.	Price	Part No.	Price
Cap Complete	10171	\$4.70	10172	\$4.70	Lever	5095	.15	5095	.15
Cap Only	5263	3.50	5260	3.50	Pressure Bar	5181	.15	5181	.15
Cap End & Clip Assem.	10231	1.20	10232	1.20	Section	10022	.25	10023	.25
Cap End	5149	.35	5148	.35	Sac	5086	.10	5087	.10
Outer Clip	10037	.35	10037	.35	Feed & Air Tube . . .	5241	.25	5240	.25
Inner Clip	5098	.25	5098	.25	Nib 7-5 "A"				3.25
Clip Band	5099	.25	5099	.25	Nib 55-5 "A"				2.50
Barrel Complete * . . .	12021	.165	21018	1.65	* Includes lever and pressure bar				
					"A" 30c old gold allowance				

SKYLINE PEN

MODELS 76P—77P

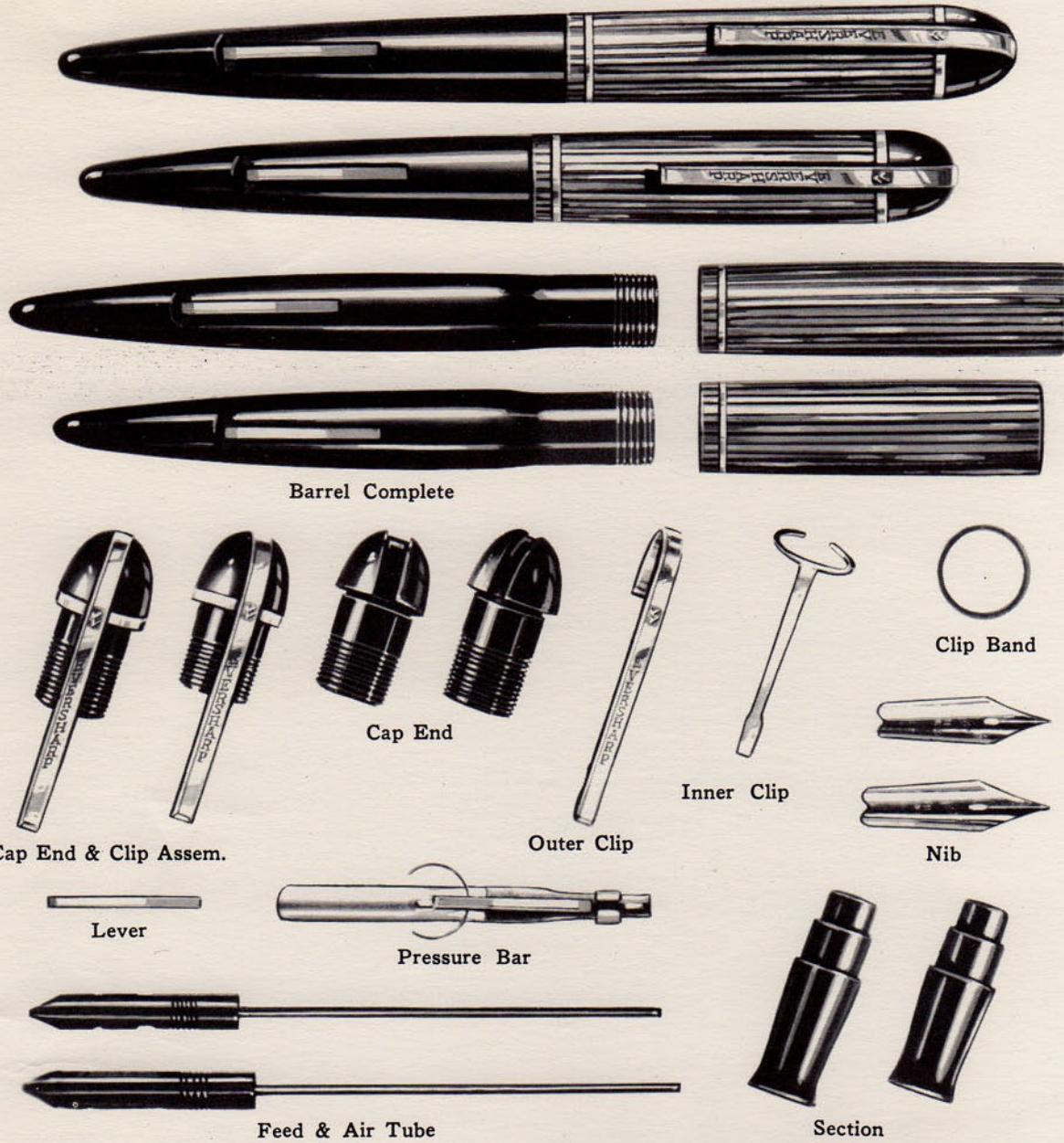


PRICE LIST

MODEL NO.	76P		77P		MODEL NO.	76P		77P	
List Price	\$5.00		\$5.00		List Price	\$5.00		\$5.00	
Part Name	Part No.	Price	Part No.	Price	Part Name	Part No.	Price	Part No.	Price
Cap Complete . . .	10169	\$1.95	10170	\$1.95	Pressure Bar	5287	.15	5287	.15
Cap Only	6427	.75	6428	.75	Section	10022	.25	10023	.25
Cap End & Clip Assem.	10231	1.20	10232	1.20	Sac	5086	.10	5087	.10
Cap End	5149	.35	5148	.35	Feed & Air Tube . .	5241	.25	5240	.25
Outer Clip	10037	.35	10037	.35	Nib 7-5 A				3.25
Inner Clip	5098	.25	5098	.25	Nib 55-5 A ,		2.50		
Clip Band	5099	.25	5099	.25	* Includes lever and pressure bar				
Barrel Complete * . .	12021	1.65	12018	1.65	A 30c allowance for old gold				
Lever	5095	.15	5095	.15	B 20c allowance for old gold				

SKYLINE PEN

MODELS 76—77

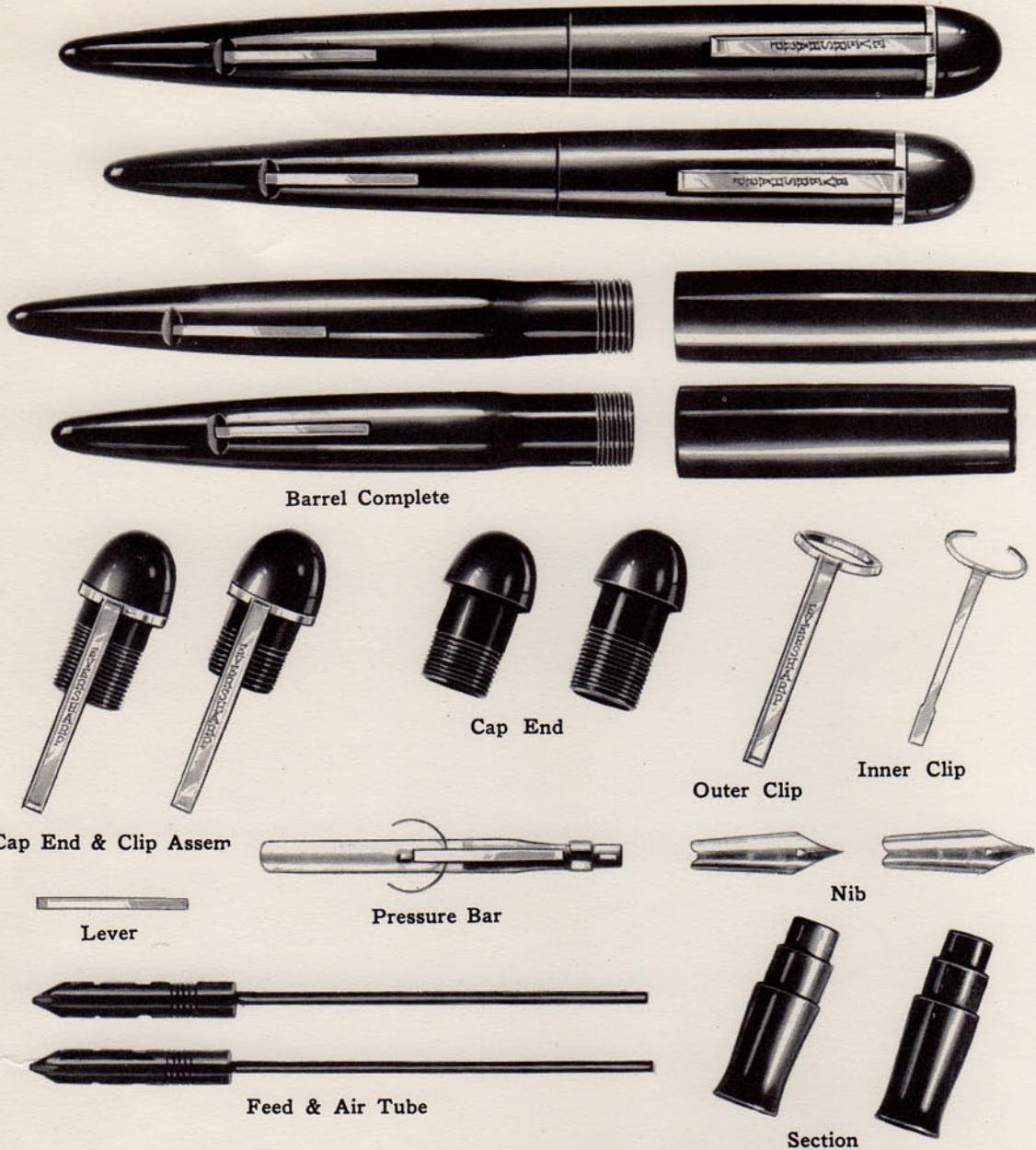


PRICE LIST

MODEL NO.	76		77		MODEL NO.	76		77	
List Price	\$5.00		\$5.00		List Price	\$5.00		\$5.00	
Part Name	Part No.	Price	Part No.	Price	Part Name	Part No.	Price	Part No.	Price
Cap Complete	5970	\$1.95	5955	\$1.95	Lever	5095	.15	5095	.15
Cap Only	6290	.75	6292	.75	Pressure Bar	5287	.15	5287	.15
Cap End & Clip Assem. 10231	1.20		10232	1.20	Section	10022	.25	10023	.25
Cap End	5149	.35	5148	.35	Sac	5086	.10	5087	.10
Outer Clip	10037	.35	10037	.35	Feed & Air Tube . .	5241	.25	5240	.25
Inner Clip	5098	.25	5098	.25	Nib 7-5 A				3.25
Clip Band	5099	.25	5099	.25	Nib 55-5 A				2.50
Barrel Complete * . .	12021	1.65	12018	1.65	* Includes lever and pressure bar				
					A 30c allowance for old gold				

STREAMLINER PEN

MODELS 98—99

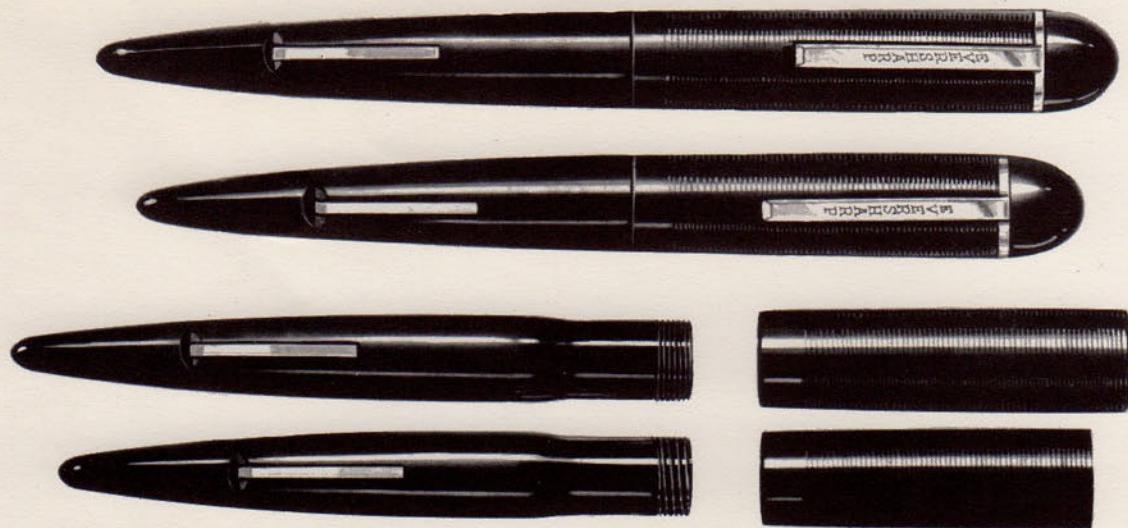


PRICE LIST

MODEL NO.	98		99		MODEL NO.	98		99	
List Price	\$3.95		\$3.95		List Price	\$3.95		\$3.95	
Part Name	Part No.	Price	Part No.	Price	Part Name	Part No.	Price	Part No.	Price
Cap Complete	10248	\$1.45	10250	\$1.45	Pressure Bar	5287	.15	5287	.15
Cap Only	5309	.60	5158	.60	Section	10022	.25	10021	.25
Cap End & Clip Assem.	6289	.85	6288	.85	Sac	5086	.10	5087	.10
Cap End	5317	.35	5318	.35	Feed & Air Tube . . .	6102	.25	5934	.25
Outer Clip	5666	.25	5666	.25	#25 Nib * "A" . . .		1.25		1.25
Inner Clip	6203	.25	6203	.25	#24 Nib "A" . . .		1.25		1.25
Clip Band					± Includes Clip & Pressure Bar				
Barrel Complete ± . . .	12021	1.65	12018	1.65	*	When heel is marked with heart use as #24 nib			
Lever	5095	.15	5095	.15	"A" 20c allowance as old gold				

STREAMLINER PEN

MODELS 98L—99L (*Non-Guaranteed*)

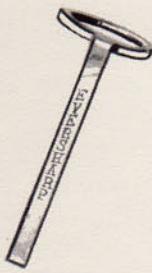


Barrel Complete



Cap End & Clip Assem.

Cap End



Outer Clip

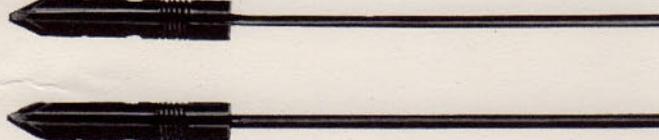


Inner Clip

Lever

Pressure Bar

Nib



Feed & Air Tube



Section

PRICE LIST

MODEL NO.

98L

99L

List Price

\$3.95

\$3.95

Part Name

Part No.

Price

Part No. Price

98L

99L

MODEL NO.

\$3.95

\$3.95

List Price

Cap Complete

7075

\$1.45

7073

\$1.45

Pressure Bar

.15

5287

.15

Cap Only

7071

.60

7069

.60

Section

.25

10022

.25

Cap End & Clip Assem.

6289

.85

6288

.85

Sac

.10

5086

.10

Cap End

5317

.35

5318

.35

Feed & Air Tube

.25

6102

.25

Outer Clip

5666

.25

5666

.25

#25 Nib * "A"

1.25

1.25

Inner Clip

6203

.25

6203

.25

#24 Nib "A"

1.25

1.25

Clip Band

± Includes Clip & Pressure Bar

Barrel Complete ±

12021

1.65

12018

1.65

*

When heel is marked with heart use as #24 nib

Lever

5095

.15

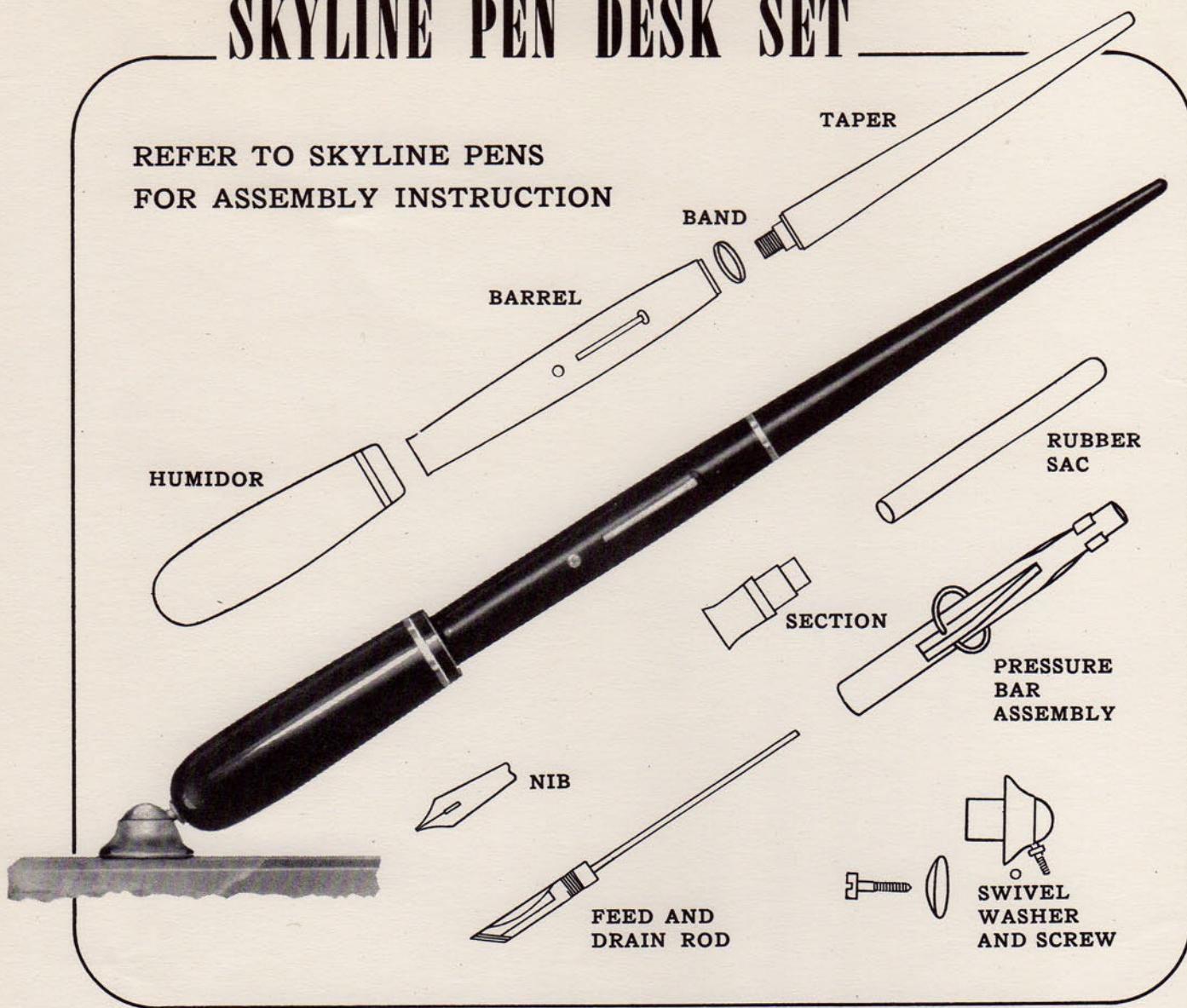
5095

.15

"A" 20c allowance as old gold

SKYLINE PEN DESK SET

REFER TO SKYLINE PENS
FOR ASSEMBLY INSTRUCTION



SKYLINE DESK SET PENS

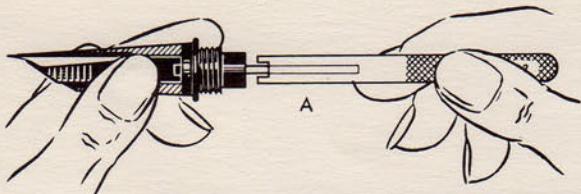
The interior mechanism of EVERSHARP SKYLINE Desk Pens is the same as the interior mechanism of EVERSHARP SKYLINE Pocket Pens. Refer to instructions and cross section diagram shown on pages for assembly.

	Pen List Price	\$3.50	\$5.50
	Symbols	No. 1	No. 2
Nib		1.25	3.25
Section . . . . .		.25	.25
Taper . . . . .		.35	.35
Barrel		1.50	2.00
Humidor		1.00	1.00
Swivel, washer and screw . . . . .		.50	.50
Pressure bar . . . . .		.15	.15
Sac . . . . .		.15	.15
Band . . . . .		.15	.15
Lever and pivot wire . . . . .		.25	.25
Feed . . . . .		.25	.25

Allowance for old nib: No. 1—20c; No. 2, 30c.

FIFTH AVENUE PENS (Cont'd)

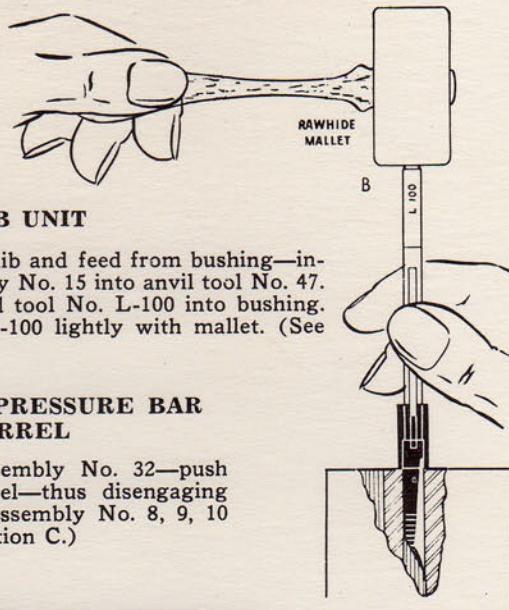
INSTRUCTIONS FOR DIS-ASSEMBLY



DIS-ASSEMBLY OF SHEATH AND NIB UNIT

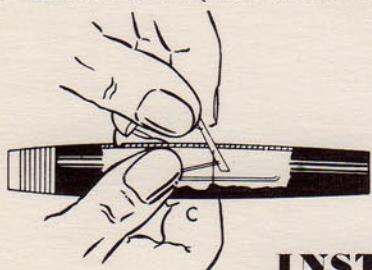
1. Unscrew sheath assembly No. 21. Remove sac No. 20. Remove nib assembly No. 15 by fitting prongs of bushing adjusting tool No. L-102 into slots of bushing and pushing through point of sheath No. 16. (See illustration A.)

2. To remove nib and feed from bushing—insert nib assembly No. 15 into anvil tool No. 47. Then insert feed tool No. L-100 into bushing. Tap tool No. L-100 lightly with mallet. (See illustration B.)



DIS-ASSEMBLY OF PRESSURE BAR FROM BARREL

Raise lever on barrel assembly No. 32—push toward open end of barrel—thus disengaging pivot ring. Pressure bar assembly No. 8, 9, 10 will drop out. (See illustration C.)



INSTRUCTIONS FOR ASSEMBLY

ASSEMBLY OF NIB UNIT AND SHEATH

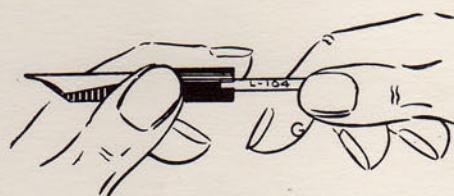
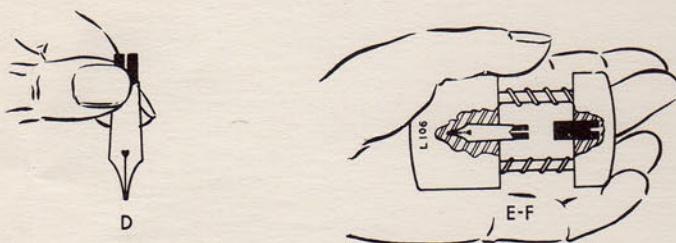
1. Place feed No. 13 on nib No. 14—three thirty-seconds from end of nib. Then insert into bushing No. 12 with fingers. (See illustration D.)

2. Place bushing assembly into nib assembly tool No. L-106—being careful to fit nib into slot. (See illustration E.) Then place nib assembly tool No. L-106 into palm of hand—squeeze gently. (See illustration F.) Release tool No. L-106 and remove nib unit No. 15.

3. Place air tube on tool No. L-104 and insert into hole in end of feed. (See illustration G.) Remove tool No. L-104.

4. Place threaded end of sheath No. 16 into hole in anvil tool No. 47. Then place nib unit No. 15 in nib unit assembly tool No. L-101—push into top end of sheath until stop mark on tool No. L-101 has been reached. (See illustration H.) If nib unit is not lined up with end of sheath—insert bushing adjusting tool No. L-102 into bushing and turn nib unit to proper position.

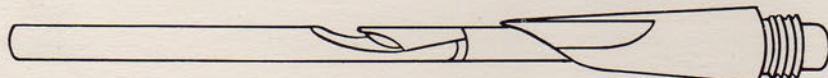
5. Cement sac No. 20 on end of sheath assembly.



TO INSERT 5TH AVENUE NIB BUSHING UNITS IN SHEATH

1. Put A6009 Tool in Vise or Chuck.
2. Start Nib Bushing Assembly into Sheath by Hand.

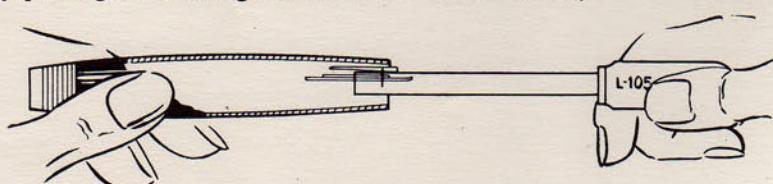
3. Tap Sheath with Mallet using Two Fingers on Sheath to Turn and Line up same with Nib while Tapping.



ASSEMBLY OF PRESSURE BAR ASSEMBLY INTO BARREL

Place pressure bar assembly No. 11 on tool No. L-105. Insert into barrel by pushing lever through barrel slot—

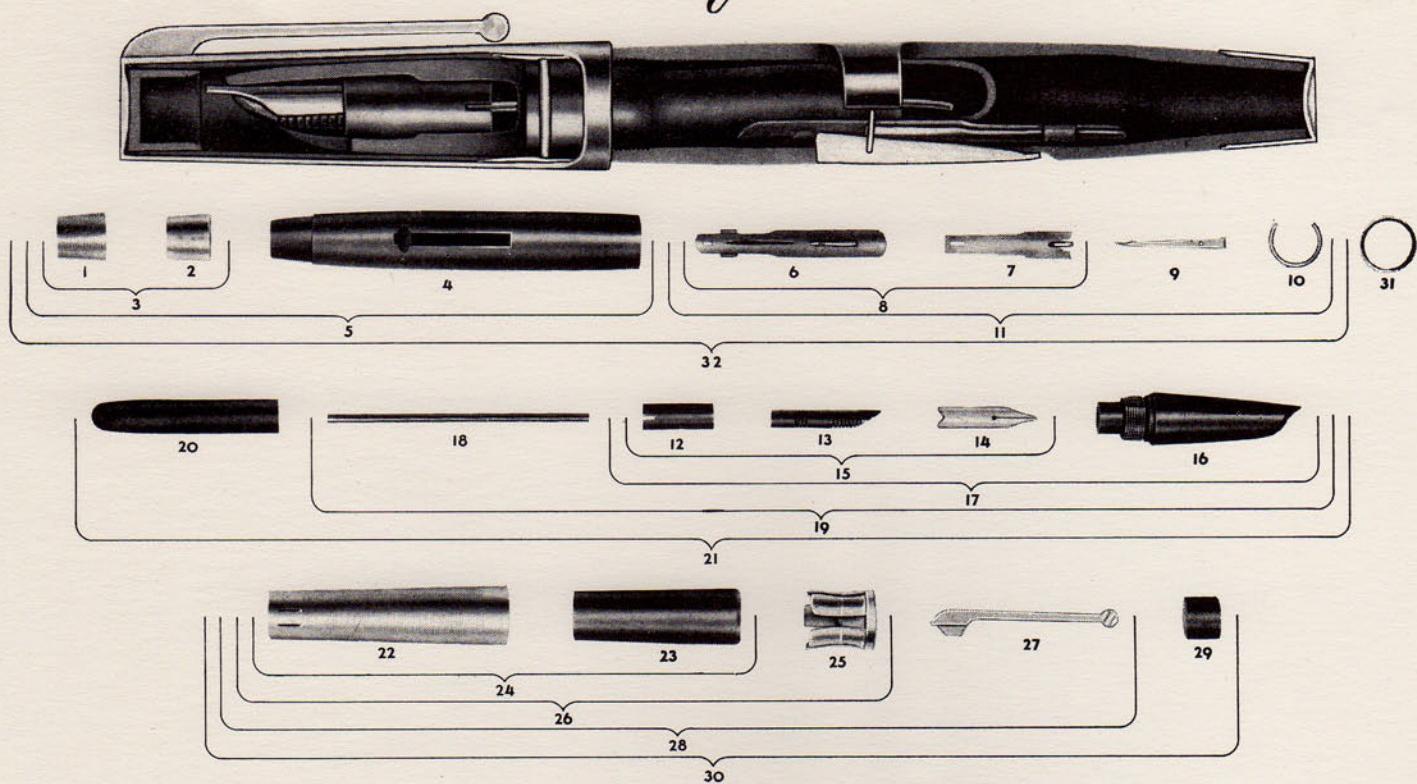
pivot ring with seat itself. Remove tool No. L-105. (See illustration I.)



ASSEMBLY OF BARREL AND SHEATH

Screw sheath assembly into barrel—bottom slot of sheath should line up with lever.

EVERSHARP "Fifth Avenue" PEN



PART NAMES AND NUMBERS

14. Nib (Point) Allowance		1. Barrel End	5	32	20. Sac
13. Feed and Feed Tube	15	2. Barrel Bushing			22. Cap Shell
12. Nib Bushing	16	4. Barrel only	11	32	23. Cap Liner
16. Sheath		9. Lever			25. Friction Spring
14. Nib (Point) Allowance		10. Pivot Ring	8	32	27. Clip
13. Feed and feed tube	15	6. Pressure Bar			29. Inner Cap
12. Nib bushing	16	7. Pressure Bar Spring			31. Friction Ring

PEN PARTS AND PRICES

Part Name	Symbol Nos.	List Price	Purchase Price						Exchange Price		
			20	21	22	62	64	65	62	64	65
14. Nib (point)	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
13. Feed and feed tube25	.25	.25	.25	.25	.25	.25	.25	.25	.25
12. Nib bushing25	.25	.25	.25	.25	.25	.25	.25	.25	.25
16. Sheath	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
32. Barrel complete	4.60	4.60	4.60	8.50	8.50	8.50	5.00	5.00	5.00	5.00
Pressure bar assembly with lever50	.50	.50	2.00	2.00	2.00	1.00	1.00	1.00	1.00
20. Sac10	.10	.10	.10	.10	.10	.10	.10	.10	.10
30. Cap complete	4.35	4.35	4.35	25.00	25.00	25.00	12.50	12.50	12.50	12.50
31. Friction ring25	.25	.25	1.25	1.25	1.25	.65	.65	.65	.65

Be sure to specify color when ordering Gold-Filled and Pyralin Parts

EVERSHARP SKYLINE REPEATER PENCIL



HOW TO OPERATE THE EVERSHARP REPEATING PENCIL

TO OPERATE PENCIL—Hold pencil with tip down. Press top (13) down and a lead will appear at the pencil's tip ready for writing. See Fig. 1. As you use up the lead simply press down on the top and more lead will appear at the tip.

Eversharp Repeating Pencils are continuous-feed pencils. Eight sticks of lead can be used before you need to reload.

The micromatic movement (measured feeding of square lead) is perfectly controlled. Each full press and release of the thumb produces at the tip the exact amount of square lead needed for writing.

Note: It may be necessary sometimes to shake the pencil several times to permit any leads which may have lodged in the magazine to be fed to the tip.

REPELLING LEAD—If a lead sticks out too far from the pencil's tip, press the top (13) down. When the top (13) is held down, the lead propels

ling clutch (8) releases the stick of lead and permits you to push the lead at the tip back into the pencil.

HOW TO RELOAD—Remove the top (see Fig. 3). Then drop leads, two or three at a time, into magazine (11) through narrow slot (5). Do not push the leads through the narrow slot (5). Only a light touch with the finger is required. Forcing leads through the narrow slot is likely to shave lead dust from the lead stick corners which may later clog the tip.

The extension of the magazine becomes visible only when lead ceases to enter the clutch. It is a signal to reload the magazine. After reloading, the extension recedes within the barrel as soon as a lead stick enters the jaws of the propelling clutch (8).

WARNING:

1. Use only Eversharp Red Top Leads. Other leads may jam the pencil.
2. Never load more than 8 sticks of lead.



Fig. 1



Fig. 2



Fig. 3

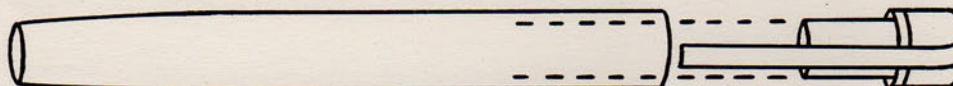


SKYLINE BARREL

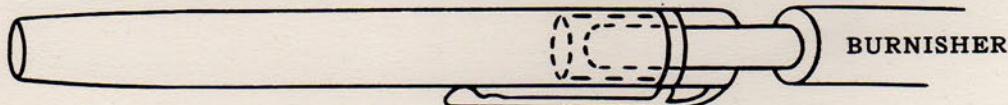
Consist of barrel and clip assembly

BARREL

CLIP ASSEMBLY



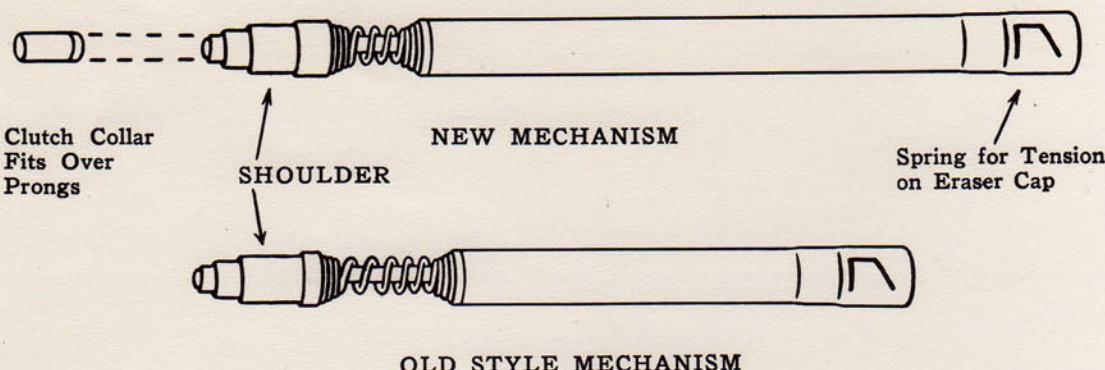
To repair clip. Remove complete clip assembly from barrel and replace with a new one.



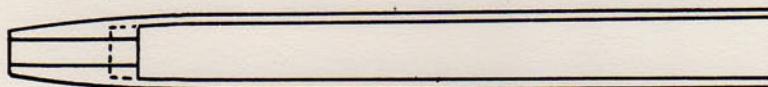
To remove assembly. 1. Crush top of clip assembly with pliers. 2. Insert burnishing tool between barrel and sleeve of clip assembly. Press down burnisher to free sleeve from barrel. 3. Remove burnisher and pull out complete clip assembly with pliers. 4. Use 5/16 drill in barrel if new assembly does not fit in easily. 6. Insert sleeve of new clip assembly in barrel and tap in with mallet.

SKYLINE REPEATER PENCIL (Cont'd)

MECHANISM



The repeater mechanism is made as a complete unit. The only removable part is the *clutch collar*. Old obsolete mechanisms have about $\frac{1}{8}$ inch longer *shoulder* than the present ones. To use a new mechanism on old barrels, it is necessary to *drill* the shoulder $\frac{1}{8}$ inch with a 17/64 drill.

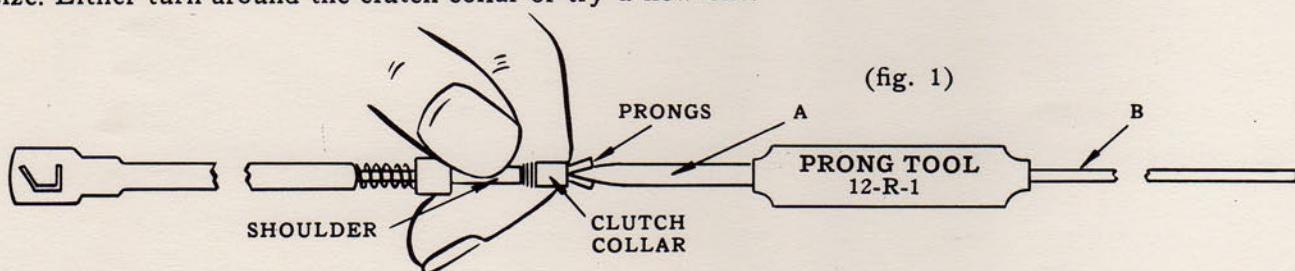


OLD STYLE BARREL
Drill Out $\frac{1}{8}$ Inch for New Mechanism

To use obsolete mechanism in new barrels, add as many washers to the mechanism needed (to shorten the *shoulder*) before inserting the mechanism into the barrel. (Use AK 22 washers.) *Mechanism* should protrude $\frac{1}{8}$ inch from barrel to be correct. (A little past the treads.)

REPAIR SKYLINE PENCIL MECHANISM AS FOLLOWS:

1. Clean out magazine leads through top. Press down *shoulder* (fig. #1) and insert B of 12-R-1 through bottom of *prongs* to insure clear lead channel.
2. Spread *Clutch prongs* by pressing down *shoulder* (fig. #1) and insert A of 12-R-1 *into* prongs up to *clutch collar*. Twist tool out *slowly*, pushing up *shoulder* at the same time. This will spread and straighten the prongs.
3. Tap *clutch prongs* with 12-R-2 tool (for standard leads) and 12-R-3 tool (for thin leads). Open *clutch jaws* and insert tap. Release clutch jaws and back out tap.
4. Test for lead slipping before inserting in barrel. If leads still slip the *clutch collar* may be oversize. Either turn around the *clutch collar* or try a new one.



TIPS

Tip may become clogged with lead dust or broken bits. Occasionally colored leads swell and clog in warm, humid weather. *Tap out* loose lead bits and use drill to clean the end. Use #56 (12-R-2) drill for standard leads or #63 drill (12-R-3) for thin leads. If tip fails to hold lead snug, replace tip.

PRESENTATION REPEATER PENCIL

MODELS D-160—D-161—J-160—J-161



Barrel Assem.



Mechanism



Barrel End and Clip Assem.



Eraser Cap



Tip



Clutch Collar

PRICE LIST

MODEL NO.	D-160		D-161	
	J-160	\$5.00	J-161	\$5.00
Part Name	Part No.	Price	Part No.	Price
Barrel Assem. less Clip Assem.	5126	\$2.75	5127	\$2.75
Barrel Only	5046	1.25	5047	1.25
Barrel Shell	5057	1.50	5058	1.50
Barrel End and Clip Assem.	6778	1.25	6778	1.25
Mechanism	5269	.50	5229	.50
Clutch Collar Only	6084	.10	6084	.10
Tip	6450	.50	6450	.50
Eraser Cap	5589	.60	5589	.60

PRESENTATION REPEATER PENCIL

MODELS 160—161



Barrel Assem.



Mechanism



Barrel End and Clip Assem.



Eraser Cap



Tip



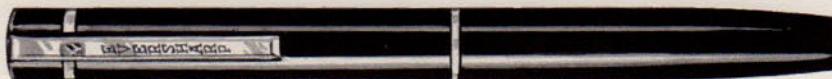
Clutch Collar

PRICE LIST

MODEL NO.		160		161
List Price		\$5.00		\$5.00
Part Name	Part No.	Price	Part No.	Price
Barrel Assem. less Clip Assem.	5126	\$2.75	5127	\$2.75
Barrel Only	5046	1.25	5047	1.25
Barrel Shell	5057	1.50	5058	1.50
Barrel End and Clip Assem.	6278	.75	6278	.75
Mechanism	5269	.50	5229	.50
Clutch Collar Only	6084	.10	6084	.10
Tip	6450	.50	6450	.50
Eraser Cap	5121	.15	5121	.15

SKYLINER REPEATER PENCIL

MODELS 176P—177P



Barrel Assem.



Mechanism



Barrel End and Clip Assem.



Eraser Cap



Tip



Clutch Collar

PRICE LIST

MODEL NO.	176P		177P	
List Price	\$3.75		\$3.75	
Part Name	Part No.	Price	Part No.	Price
Barrel Assem. less Clip Assem.	6767	\$1.75	6769	\$1.75
Barrel End and Clip Assem.	6278	.75	6278	.75
Mechanism	5269	.50	5229	.50
Clutch Collar	6084	.10	6084	.10
Tip	6450	.50	6450	.50
Eraser Cap	5121	.15	5121	.15

SKYLINER REPEATER PENCIL

MODELS 176—177



Barrel Complete



Mechanism Complete



Barrel End and Clip Assem.



Eraser Cap



Clutch Collar



Tip

PRICE LIST

MODEL NO.

176

177

List Price

\$3.75

\$3.75

Part Name

Part No.

Price

Part No.

Price

Barrel Assem. less Clip Assem.	6768	\$1.75	6770	\$1.75
Barrel End and Clip Assem.	6278	.75	6278	.75
Mechanism	5269	.50	5229	.50
Clutch Collar	6084	.10	6084	.10
Tip	6450	.50	5450	.50
Eraser Cap	5121	.15	5121	.15

STREAMLINER REPEATER PENCIL

MODELS 198—199



Barrel Assem.



Mechanism



Barrel End and Clip Assem.



Eraser Cap



Tip



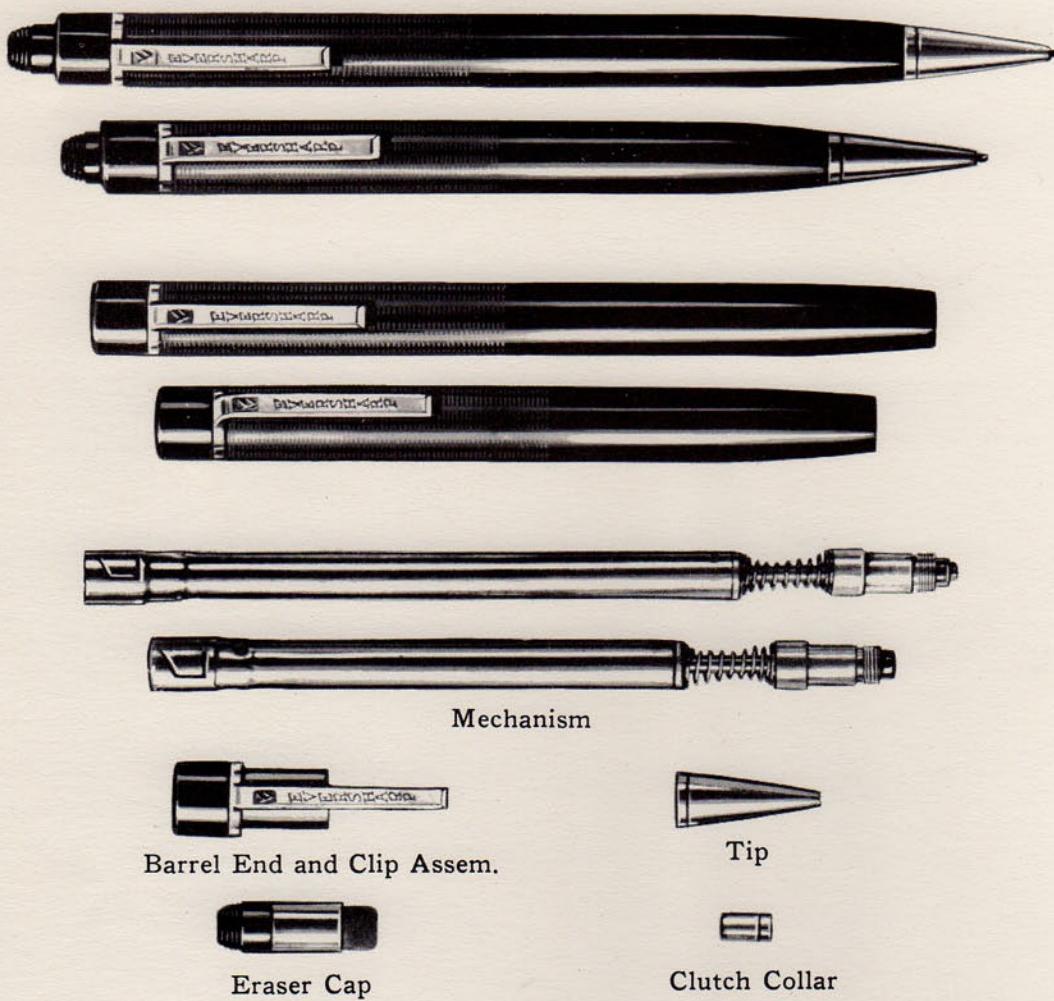
Clutch Collar

PRICE LIST

MODEL NO.		198		199
List Price		\$2.00		\$2.00
Part Name	Part No.	Price	Part No.	Price
Barrel less Clip Assem.	5297	\$1.00	5069	\$1.00
Barrel End and Clip Assem.	6277	.50	6277	.50
Mechanism	5269	.50	5229	.50
Clutch Collar	6084	.10	6084	.10
Tip	6450	.50	6450	.50
Eraser Cap	5121	.15	5121	.15

STREAMLINER REPEATER PENCIL

MODELS 198L—199L



PRICE LIST

MODEL NO.	198L		199L	
List Price	\$2.00		\$2.00	
Part Name	Part No.	Price	Part No.	Price
Barrel less clip assem.	7077	\$1.00	7080	\$1.00
Barrel End and Clip Assem.	6277	.50	6277	.50
Mechanism	5269	.50	5229	.50
Clutch Collar	6084	.10	6084	.10
Tip	6450	.50	6450	.50
Eraser Cap	5121	.15	5121	.15

CA* and FIFTH AVENUE REPEATER PENCIL

MODELS 120—121 (137)



Barrel Complete



Mechanism Complete



Clip Only



Eraser Cap



Tip



Clutch Collar

PRICE LIST

MODEL NO.		120		121 (137)
List Price		\$6.50		\$6.50
Part Name	Part No.	Price	Part No.	Price
Barrel Complete	10098	\$5.00	10101	\$5.00
Barrel Only	5043	1.25	5044	1.25
Shell Only	5055	3.25	5055	3.25
Clip Only	10016	.50	10016	.50
Mechanism Complete	5269	.50	5229	.50
Clutch Collar	6084	.10	6084	.10
Tip	6450	.50	6450	.50
Eraser Cap	5042	.50	5042	.50

STAINLESS STEEL CA* REPEATER PENCIL

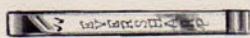
MODELS 126—127



Barrel Complete



Mechanism Complete



Clip Only



Eraser Cap



Tip



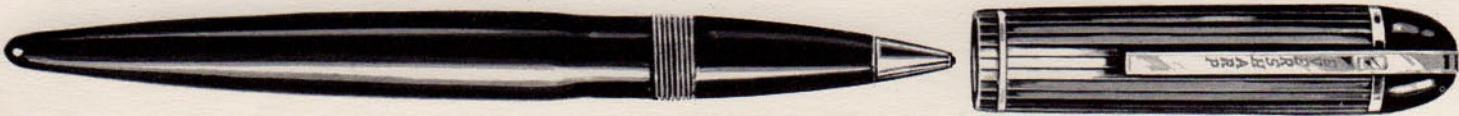
Clutch Collar

PRICE LIST

MODEL NO.					
List Price			\$4.00		
Part Name		Part No.	Price	Part No.	Price
Barrel Complete		5616	\$2.75	5615	\$2.75
Barrel Only		5043	1.25	5044	1.25
Shell Only		5592	1.00	5592	1.00
Clip Only		6648	.50	6648	.50
Mechanism Complete		5269	.50	5229	.50
Clutch Collar		6084	.10	6084	.10
Tip		6450	.50	6450	.50
Eraser Cap		5042	.50	5042	.50

EVERSHARP CA* PEN

MODEL No. 25-25L



ASSEMBLY OF PEN

1. Assemble barrel and adaptor.
2. Screw tip and cartridge assembly in adaptor.
3. Test tip by writing a series of circles or figures of eight (8). No attempt should be made to repair the tip as this is a precision assembly and requires special equipment for handling.
4. Check vent hole in barrel to be certain it is free of obstruction.



BARREL COMPLETE

ADAPTOR

CAP COMPLETE



CARTRIDGE AND TIP ASSEMBLY

The repair procedure for the Model #25 pen cap is the same as the procedure used for the standard Skyline pen cap. This procedure is outlined on Page _____. All parts are interchangeable with the exception of the *cap plug*. An *aluminum inner plug* has been pressed into the cap end. This acts as a stop for the cap when screwing it on to the barrel.

IMPORTANT: *This cap end must not be used on a nib pen. It will crush the nib.*

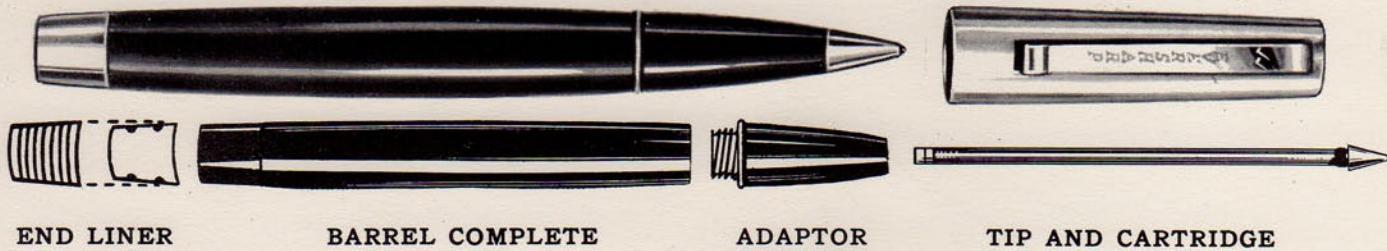
PRICE LIST

MODEL NO.			25L	
List Price			\$3.95	
Part Name	Part No.	Price	Part No.	Price
Cap Complete	6694	\$2.10	7070	\$1.60
Cap Only	6803	.75	7069	.60
Cap End and Clip Assem.	6813	1.35	7098	1.00
Cap End and Inner Plug Assem. . . .	6811	.50	7098	.50
Outer Clip	10037	.35	5666	.25
Inner Clip	5098	.25	6203	.25
Clip Band	5099	.25	—	—
Barrel	5925	1.25	5925	1.25
Adaptor	6741	.75	6741	.75
Cartridge	6919	.50	6919	.50

EVERSHARP CA* PEN

MODELS 26—27—37

All Eversharp CA Pens consist of Barrel or Barrel Assembly, Cap Assembly, Adaptor, Tip and Cartridge Assembly



END LINER

BARREL COMPLETE

ADAPTOR
AND RING

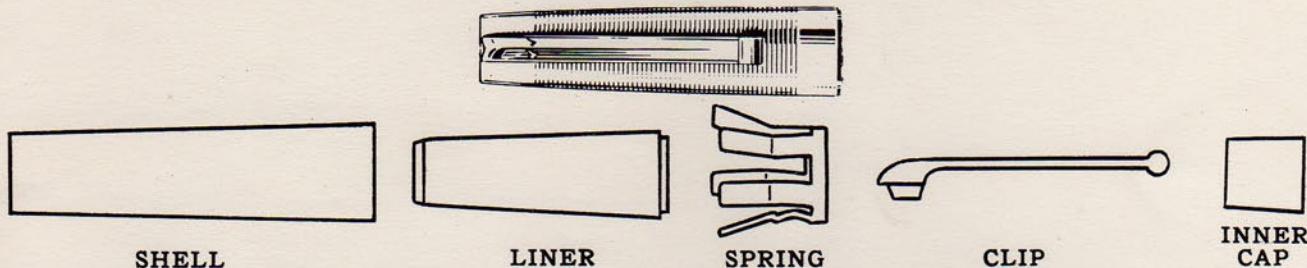
TIP AND CARTRIDGE

BARREL REPAIR

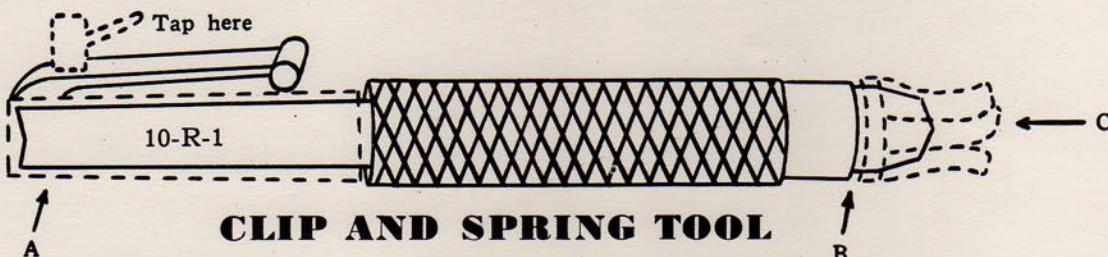
1. Consists of replacing barrel end which is a gold shell and pierced liner soldered together.
2. Pull off barrel end assembly with section pliers.
3. Tap top of barrel into barrel end assembly with a mallet. Important: Barrel must have open vent hole, either in barrel end or in side of barrel.

CAP REPAIR

Cap is a conventional snap fit design and is furnished as a complete unit.



1. Tighten clip by inserting clip and spring tool (#10-R-1) into cap and tap clip, by the check marks, with a mallet. Be sure there is no inner cap before tapping.
2. To replace friction spring, cut beveled end of cap holding spring, with lathe tool.
3. Pull out friction spring with hook.
4. Insert new spring between liner and cap shell with clip and spring tool. Spin in with a flat burnisher #10-R-7. Use 61 cap insert (cut out for clip) over cap when using lathe for spring repair to prevent chuck from marring cap.



CLIP AND SPRING TOOL

A. To tighten clip. B. To insert friction spring in cap.

C. Use end to shape cap top if it gets flat.

PARTS LIST EVERSHARP CA* PENS

MODEL NO.

26

27

37

List Price

\$5.95

\$5.95

\$7.95

Part Name

Part No.

Price

Part No.

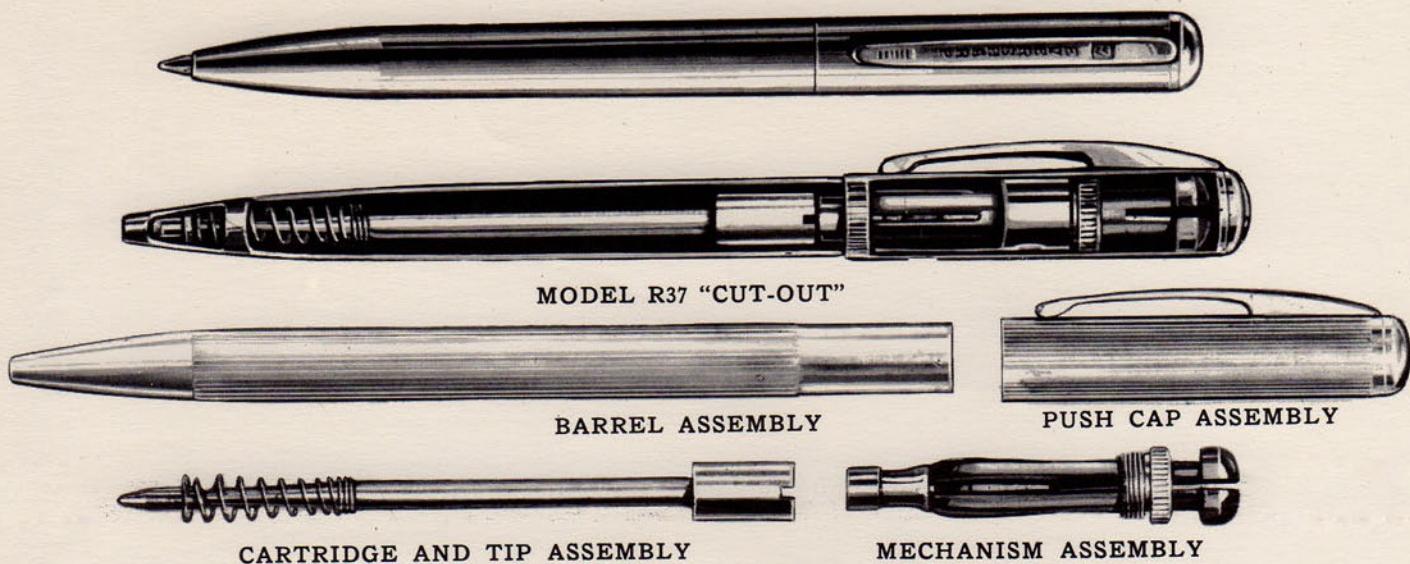
Price

Part No.

Price

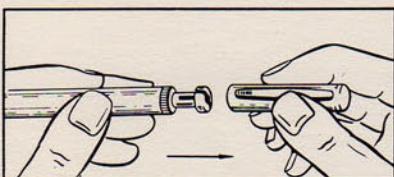
Cap Complete	6839	\$3.35	6839	\$3.35	6403	\$4.35
Clip Only	6641	.60	6641	.60	6407	.60
Barrel Complete	6823	2.50	6416	2.50	5732	2.50
Barrel End Only	6413	.25	6413	.25	5279	.25
Adaptor with Ring	5921	1.10	5921	1.10	5921	1.10
Cartridge	6919	.50	6921	.50	6921	.50

EVERSHARP CA* REPEATER PENS

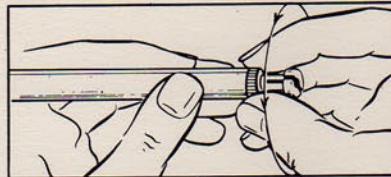


Repairs to the CA Repeater Pen will consist chiefly of replacement of parts. No attempt should be made to repair the various assemblies, as specialized tooling would be required. Dents may be removed with 10-R-2 tool. Insert tool into barrel and burnish.

DIS-ASSEMBLY OF PEN



Remove push cap—cap is of snap fit design and is removed by pulling from barrel assembly.

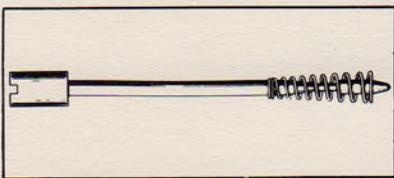


Remove mechanism assembly. Un-screw mechanism adaptor from barrel assembly, turning in counter-clockwise direction.



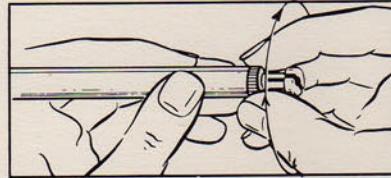
Remove tip and cartridge assembly from barrel. Hold open end of barrel down and tip and cartridge assembly will slide out.

ASSEMBLY OF PEN

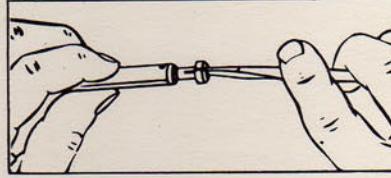


Examine barrel assembly carefully for possible obstruction in barrel. Be sure inside of barrel is clean.

Write several lines with tip and cartridge assembly. Be sure actuating spring is in place on nozzle of cartridge. If satisfactory, insert tip and cartridge assembly in barrel.



Examine mechanism assembly for possible defects. Mechanism should be clean and lubricated with a small amount of vaseline. If mechanism appears satisfactory, assemble to barrel. Insert mechanism in barrel and turn clockwise, tightening firmly in place. Operate mechanism several times. If pen does not operate properly, replace mechanism.



Assemble cap to barrel. Press cap firmly in place and operate several times. Check cap for snug fit on cap plug. If cap does not fit properly, remove cap. Using a screwdriver blade, spread opening in cap plug to desired fit.

PARTS LIST

MODEL NO.
List Price

R-37
\$9.95

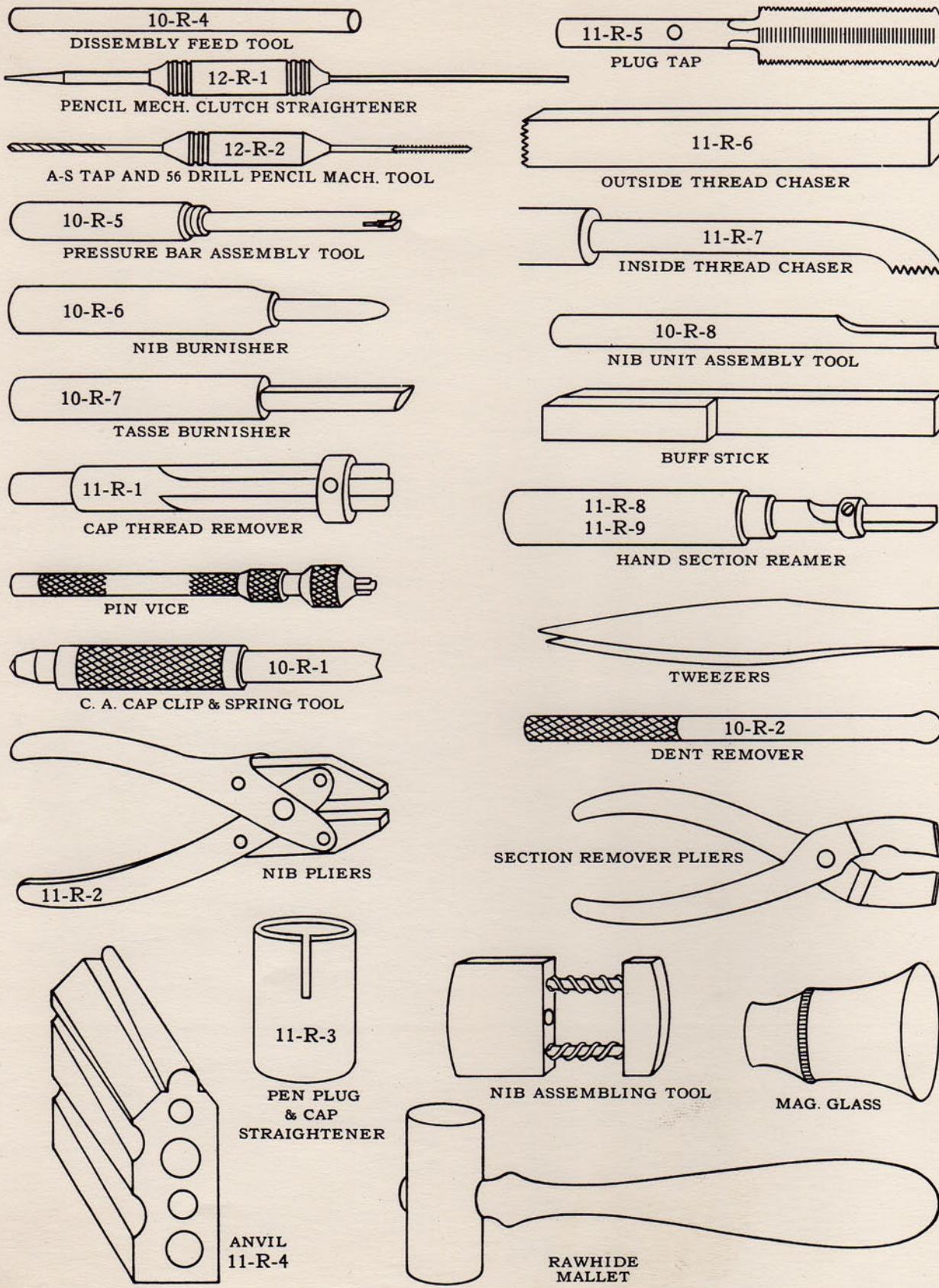
R-29
\$9.95

R-25
\$100.00
Purchase Exchange*

Part Name	Part No.	Price	Part No.	Price	Part No.	Price	Price
Cap Complete	6133	\$4.00	6133	\$4.00	6249	\$45.00	\$22.50
Clip Only	6114	.80	6144	.80	6248	10.00	5.00
Barrel Complete	6121	5.00	6254	4.50	6246	60.00	30.00
Mechanism	6638	1.50	6638	1.50	6638	1.50	1.50
Cartridge	6939	.50	6939	.50	6639	.50	.50

* Exchange price based on salvage value of gold in exchanged solid gold parts.

STANDARD TOOLS



STANDARD TOOLS

New Number	Old Number	Name	Price
10-R-4	L-100	DISASSEMBLY FEED TOOL.....	\$.40
10-R-5	L-105	PRESSURE BAR ASSEMBLY TOOL.....	1.20
10-R-6	#5	NIB BURNISHER.....	2.75
10-R-7	#1738	TASSE BURNISHER.....	3.00
11-R-1	#D119	CAP THREAD REMOVER.....	1.75
		PIN VISE.....	1.25
10-R-1		C. A. CAP CLIP AND SPRING TOOL.....	3.00
11-R-2	#1	NIB PLIERS.....	4.00
11-R-3		PEN PLUG AND CAP STRAIGHTENER.....	6.00
11-R-4	#47	ANVIL	7.50
11-R-5	#5084	PLUG TAP.....	2.50
11-R-6	#A1743	OUTSIDE THREAD CHASER.....	3.00
11-R-7	#A1735	INSIDE THREAD CHASER.....	3.00
10-R-8	#A6009	5TH AVE. NIB ASSEMBLY TOOL.....	1.25
		BUFF STICK.....	.15
11-R-8	#D110	HAND SECTION REAMER (SMALL FEED).....	2.00
11-R-9	#D111	HAND SECTION REAMER (LARGE FEED).....	2.00
		TWEEZERS	1.00
10-R-2		DENT REMOVER.....	3.00
	#16	SECTION REMOVER PLIERS.....	2.00
10-R-9	#1-106	5TH AVE. NIB ASSEMBLING TOOL.....	8.50
		MAG. GLASS	2.00
	#45	RAWHIDE MALLET.....	1.10
12-R-1		PENCIL MECH. CLUTCH STRAIGHTENER.....	1.00
12-R-2		A-S TAP AND 56 DRILL PENCIL MACH. TOOL.....	1.30
12-R-3	A-8-1	TAP (THIN LEAD MECH.).....	1.00
	#63	DRILL (THIN LEAD TIPS).....	.30
	#2	DRILL (LARGE PEN FEED) #2.....	.30
	#5	DRILL (SMALL PEN FEED) #5.....	.30
	17/64	DRILL (PENCIL MECH. SHOULDER).....	.50
	5/16	DRILL (PENCIL CLIP SLEEVE).....	.50
	000	EMERY PAPER FOR NIBS.....	.05
		SHINO POLISHING CLOTH.....	.20
	3-M	METAL CAP CEMENT.....	.30